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FUNCTIONAL FOOD PRODUCT CONSUMPTION AMONG MALAYSIAN CONSUMERS: THE RELATIONSHIP BETWEEN INTENTION AND ACTUAL BEHAVIOUR

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ABSTRACT

Functional food that fortified with nutritional is produced with an objective to promote better health and well-being, as well as preventing chronic diseases. The future of functional food market will depend on the acceptance of the consumers towards such products. This study examined the relationship between intention and the actual consumption behaviour of functional food among Malaysian consumers. Data were collected from consumers shopping at hypermarkets in Malaysia by using mall intercept method. From the analysis undertaken, it was found that the level of behavioural intention to consume functional food among consumers is encouraging. The results also revealed that intention positively influences the actual consumption behaviour. Despite the positive relationships, the explanatory power of intention to predict consumption behaviour was moderate, indicating that other variables were also important in predicting the behaviour to consume functional food among Malaysian consumers. Future study was also proposed.

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Keywords: Functional food, Intention, Consumption behaviour, Malaysia

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INTRODUCTION

Enjoying more unhealthy foods and consuming less of healthy foods and drinks, such as functional foods that can prevent an individual from getting some chronic diseases, have become a behavioural problem among Malaysians (MOH, 2010). Supported by the report in the latest National Health and Morbidity Survey in 2011 that Non-Communicable Diseases (NCDs) continuously become the main health problems in Malaysia, which is the most prevalent, unpreventable diseases and expensive to cure, yet, the situation has not improved (MOH, 2010). NCDs, including diabetes, heart disease, high blood pressure, strokes, hypertension, kidney disease, chronic lung diseases, high cholesterol and certain types of cancer, is also known as chronic diseases. Reported by World Health Organisation (WHO), NCDs are growing, affecting both developed and developing countries, and people in all age groups (WHO, 2011).

Following the threat, food industries have introduced a new category of food product named “functional food”. Functional food that fortified with nutritional is produced with an objective to promote better health and well-being, as well as preventing chronic diseases. Diplock et al. (1999) defined functional food as “a food that affects beneficially one or more target functions of the body, beyond adequate nutritional effects, in a way that is relevant to either an improved state of health and well being and/or reduction of risk of diseases”. Many studies discovered that functional foods have been proven scientifically to improve overall health, prevent health-related diseases and reduce health problems (Wolk et al., 1999; Pereira et al., 2004).

This has resulted in considerable public awareness and interest in functional foods in Malaysia. As a result, some consumers are switching to products they perceive to be healthier or more purposeful in their diet. Consequently, the relationship between unhealthy diets and the development of such diseases suggests that there is a need to examine the relationship between consumer intention and consumption behaviour of functional food (Verbeke & Vackier, 2005; Armitage & Conner, 2001). In addition, functional foods and their association with health benefits is rather a new concept in Malaysia, and it is worth investigating the behavioural intention and the actual behaviour of Malaysians towards such foods.

To date, empirical studies on relationship between intention to consume functional food and the actual consumption behaviour of functional food particularly in the Malaysian context is scarce. Most of the previous studies have been conducted in developed countries such as the United States (for example; Gilbert, 1997, 2000; Childs, 1997) and in European countries (for example; Poulsen, 1999; Niva, 2007; Verbeke, 2005; Urala & Lahteenmaki, 2007). Thus, the aim of this study is to examine the relationship between consumer intention to consume functional food and the actual consumption behaviour of such food in the context of a non-western country, i.e. Malaysia.

LITERATURE REVIEW

The human behaviour towards certain foods depends on a several factors, which influence the psychological needs of humans in a different ways, and, as a result, some products are chosen while others are rejected. Individuals make a decision to consume a certain type of healthy food due to many reasons, including maintaining good health. Babicz-Zielinska (2006) reported that individual choose certain healthy food as their diet in order to gain both health and physical rewards. Therefore, consumers are expected to become more health conscious and it is acknowledged that to maintain good health is by eating healthily rather than through the use of medication (Hasler, 2002). Many studies discovered that functional foods have been scientifically proven to improve overall health, prevent health-related diseases and reduce health problems, such as high cholesterol, heart diseases, stroke and diabetes (Wolk et al., 1999; Pereira et al, 2004). Thus, the benefits of maintaining good health and well-being from consuming healthy foods, such as functional food, have increased the level of intention to consume such food among consumers.

Previous literatures show that intentions have demonstrated a significant positive relationship between intention and behaviour and accurately predicted a variety of action tendencies. In the food context, intention to consume certain type of foods is considered to be one of the most important behavioural indicators. Ajzen (1991) stated that

behaviour is influenced by individual's intention to execute or not to execute the intended behaviour, and intention is regarded as the immediate antecedent of individual behaviour. Intention was described as one of "the motivational factors that influence a behaviour and to indicate how hard people are willing to try or how much effort they would exert to perform the behaviour" (Armitage & Conner, 2001). Armitage and Conner (2001) in their meta-analytic review of 185 studies found that intention was a superior predictor of future behaviour. In addition, meta-analyses reviews indicated that intention represents for 20% to 30% of the variance in health related behaviours (Armitage & Conner, 2001; Conner & Sparks, 2005). Moreover, it shows that intention influences the numerous behavioural tendencies in many different settings; thus, intention has been established to have a significant positive relationship towards behaviour.

The above discussion shows that it is important to study the relationship between intention and consumption behaviour of functional food that it cannot be ignored. Therefore, further empirical research is warranted to examine the predictive power of intention towards functional food consumption behaviour in Malaysia.

METHODS

This study is correlational in nature where data was gathered once, to answer the study's research questions. The study was conducted with the intention to obtain a good grasp of the relationship between consumer-behavioural intention towards functional food and the actual behaviour. A survey method was employed because this study strongly believes that survey research is best adopted to obtain personal and social facts, beliefs, and attitudes (Kerlinger, 1973). The unit of analysis for this study was the individual consumer aged 18 and above who went shopping at various hypermarkets in Malaysia. Questionnaires were distributed to the respondents personally.

The sampling procedure used for the present study was mall intercept survey whereby respondents are intercepted during shopping in malls. For data collection purposes, 800 questionnaires were distributed to individual consumers in 12 hypermarkets in Malaysia. Out of this number, 486 were returned and 34 questionnaires were excluded because they were incomplete. A total of 452 responses were usable and used for subsequent analysis, giving a response rate of 56.5%. The sample size appears to be adequate and was comparable to several studies using adult consumers as the study sample in Malaysia. Respective sample sizes for such studies were 439 (Teng et al., 2012) and 200 (Zuraini et al., 2010).

In this study the analysis on consumer-behaviour intention to consume functional foods was done using a general functional food without any specification on different categories since functional food is a new concept in Malaysia. Five-point Likert scales were used in all measures to minimise the confusion among respondents and to make sure of the equality among variables (Ackfeldt & Coole, 2003). The five-point Likert scale are: 1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree.

Consumer intention to consume functional food was measured using four items. Respondents were asked to indicate their response to the following statement:

1. I will eat/drink functional foods to make myself healthier.
2. I intend to eat/drink functional foods to prevent me from certain chronic diseases.
3. I want to eat/drink functional food products if I can trust it contains healthy component.

4. I expect to consume more functional foods in the future.

Reliability of this subscale was 0.84.

Seven items were developed to examine functional food consumption behaviour. They were:

1. I often consume functional foods products.
2. I normally consume products that are good for my health and promote my well-being.
3. I will put priority to buy functional food products that are safe to be consumed.
4. When buying a product, I will look for products that contain ingredients that can make me healthier.
5. I choose to consume products that contain healthy component such as probiotic, vitamins, minerals, fat free, high fiber and low cholesterol.
6. I normally consume products that are more nutritious.
7. I choose to consume product that I believe can prevent me from certain diseases.

Reliability of this subscale was 0.88.

RESULTS AND DISCUSSION

The results in Table 1 show the level of consumer intention and the relationship between intention and functional food consumption behaviour of the consumers in Malaysia. The results reveal that the level of behavioural intention towards functional food consumption among Malaysian consumers is encouraging with mean score of 4.34. This result is equivalent to Rezai et al. (2012) and Teng et al. (2012), who reported that majority of the consumers in Malaysia are willing to pay for functional food and have a positive perception towards the intention to consume functional foods and believe that such foods are beneficial for their health. Results also explained that the functional food consumption behaviour was significantly influence by consumer intention to consume such food ($F= 322.442$; $p=.00$). Furthermore, we noted that intention positively influences the behaviour ($\beta=.65$).

TABLE 1. THE INFLUENCE OF CONSUMER-BEHAVIOURAL INTENTION ON CONSUMER-CONSUMPTION BEHAVIOUR

Independent Variable	B	SEB	β
Consumer-behavioural Intention	.66	.04	.65**

Note: $R^2=.42$; Standard deviation= .52; Mean= 4.34; $F= 322.442$; Sig. $F=.00$; ** $p<.01$

B= Unstandardised coefficient beta;

SEB= Standard error of regression coefficient;

β = Beta coefficient

Despite the positive relationships, intention only explains 42 percent of the variation in functional food consumption behaviour. This indicates that intention has moderate explanatory power to predict the behaviour and that there are other variables not considered in this study, such as lifestyle (Urala & Lahteenmaki, 2007), self-identity

(Armitage & Conner, 2001), convenience and product attribute (Bech-Larsen et al., 2001). This may indicate the inconsistency between what respondents say they intend to do and what they actually do. Ajzen and Fishbein (2005) referred to the issue of poor intention in predicting consumption behaviour as a literal inconsistency, which is the tendency for an individual not to do what they said they were going to do.

Standard deviation of .52 explains that the data were quite similar, which is likely owing to the low variation in behavioural intention among respondents. The low variation in behavioural intention does not allow for consumer intention to discriminate between the consumption behaviour of the consumers even if intention does have an influence on the behaviour. According to Armitage and Conner (2001), they stated that the low amount of variation explained should be presumed with larger R-square value. Other studies conducted in the food context also produced a small contribution of intention on consumption behaviour. This is consistent with the meta-analyses study in health related behaviours by Armitage and Conner (2001), and Conner and Sparks (2005) who reported that the variance explained in intention were between 20 percent and 30 percent.

The positive relationship between intention and consumption behaviour explains that consumers have a positive impression towards functional food and that their consumption is due to a strong belief that functional foods are beneficial for their wellness and health as a preventive measure to certain diseases, longevity and healthy lifestyle. Zuraini et al. (2010) stated that the benefit from the functional aspect of food was the most influential contributor in determining the acceptance of consumers towards healthy cakes among Malaysian. Therefore, consumer awareness and knowledge towards the beneficial health effect from functional food consumption has changed consumers towards a healthy diet.

CONCLUSION

This study aimed at examining the relationship between consumer intention to consume functional food and the actual consumption behaviour in the context of Malaysia. The analysis undertaken indicated that the level of intention to consume functional food among Malaysian consumers is promising and the results suggest that intention towards functional food has a positive influence on the consumption behaviour of such food and it is compatible with prior research. Therefore, it should be noted that intention of the consumer in this study is positively linked to the actual behaviour.

On a final note, this research was based on the response of adult consumers aged 18 and above, and thus the results do not represent the Malaysian population in general. Other segments, such as teenagers and University students, who may have different behavioural intentions towards functional food, should be investigated. Also, additional studies comparing behavioural intention of consumers from different regions of Malaysia might produce interesting findings.

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